

**From:** [Franz, Hayley](#)  
**To:** [Gaito, Danielle](#)  
**Cc:** [stergios.spanos@des.nh.gov](mailto:stergios.spanos@des.nh.gov)  
**Subject:** RE: Ammonia Criteria Request  
**Date:** Friday, September 27, 2019 3:34:32 PM  
**Attachments:** [DMR Data DES Ammonia.xlsx](#)

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Hi Danielle,

I have added a tab into the spreadsheet labeled "AmmoniaCalcs." The calculated criteria are in the top right in a bold outline, and I have also copied them below. The calculations assume that all of the flow from the lake flows through the hatchery, like you stated below. We checked in with F&G, and based on our discussions with them, we chose to use the ammonia criteria that assume salmonids are present.

Season	Acute mg/L	Chronic mg/L
Cold (Oct 1 - Apr 30)	27.86	3.65
Warm (May 1 - Sept 30)	21.98	2.33

Please let me know if you have any questions on our calculations.

Thanks!

Hayley

**Hayley Franz, P.E.**

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**From:** Gaito, Danielle <[Gaito.Danielle@epa.gov](mailto:Gaito.Danielle@epa.gov)>

**Sent:** Tuesday, September 24, 2019 10:33 AM

**To:** Franz, Hayley <[Hayley.Franz@des.nh.gov](mailto:Hayley.Franz@des.nh.gov)>

**Subject:** Ammonia Criteria Request

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Hi Hayley –

I was wondering if you would calculate the ammonia acute and chronic criteria for the Merrymeeting River for me for the Powder Mill Draft? I have included DMR data for the hatchery which has pH and temperature of the discharge, which is pumped from the Merrymeeting Lake. I

don't have ambient temp or pH otherwise. We have assumed no dilution in the river since, at times during the summer, all of the flow from the lake to the river is directed through the hatchery. I don't think the Merrymeeting is known to have salmonids (other than the ones at the hatchery).

If you could copy your Excel calculator into this file and send it back to me with the calculations for the record that would be super helpful.

Let me know if you need anything else or have questions/issues.

Thanks!  
Danielle

Danielle Gaito  
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